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LADAS & PARRY LLP 26 WEST 61ST STREET NEW YORK, NY 10023			EXAMINER KIM, CHRISTOPHER S	
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* GORAN W. SUNDHOLM

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Appeal 2009-000668  
Application 10/688,859  
Technology Center 3700

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Decided: August 28, 2009

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*Before:* JENNIFER D. BAHR, LINDA E. HORNER, and MICHAEL W.  
O'NEILL, *Administrative Patent Judges.*

BAHR, *Administrative Patent Judge.*

DECISION ON APPEAL

## STATEMENT OF THE CASE

Goran W. Sundholm (Appellant) appeals under 35 U.S.C. § 134 (2002) from the Examiner's decision rejecting claims 1-10, which are the only claims pending in the application. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

### *The Invention*

Appellant's claimed invention is directed to a fire-fighting installation, such as a sprinkler system. Spec., paras. [0001] and [0003].

Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. In a fire-fighting installation comprising a drive source for feeding medium into at least one spray head, the at least one spray head releasing by impact of heat, and the drive source comprising a pump unit for the feeding of the medium through a supply line, the improvements wherein

at least a portion of the supply line is filled with gas provided with a standby pressure,

a gas source maintains the standby pressure,  
and

a flow transducer is arranged to provide a signal to the pump unit if flow of the gas in the portion of the supply line exceeds a predetermined value.

### *The Rejections*

Appellant seeks review of the Examiner's rejections of claims 1-3, 6-8, and 10 under 35 U.S.C. § 102(b) as being anticipated by Ohta (US

5,117,916, issued Jun. 2, 1992), and claims 4, 5, and 9 under 35 U.S.C. § 103(a) as being unpatentable over Ohta.<sup>1</sup>

## SUMMARY OF DECISION

We REVERSE.

## ISSUE

The sole issue in dispute in this appeal is whether the pressure switches 52, 58 of Ohta constitute a “flow transducer,” as called for in each of the independent claims 1 and 8 involved in this appeal.

The Examiner’s position in making both the anticipation rejection and the obviousness rejection is that the pressure reduction measured by Ohta’s pressure switches 52, 58 indirectly measures flow of gas in lines 20 and 44. Ans. 8. In making this finding, the Examiner reasons that in order for the pressure to drop in lines 20 and 44, there must be gas flow in lines 20 and 44 exceeding a predetermined minimum value. *Id.* According to the Examiner, a reading of the flow transducer of claims 1 and 8 on the pressure switches 52, 58 is justified because Appellant’s Specification and claims define the flow transducer only in functional terms. Ans. 7-8.

Appellant, on the other hand, argues that a pressure transducer does not necessarily measure flow, and thus is not a flow transducer. Reply Br. 3. Appellant points out that a pressure reduction can result from a temperature

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<sup>1</sup> The Examiner has withdrawn the rejection under 35 U.S.C. § 112, second paragraph, set forth in the Final Rejection. Advisory Action, mailed Aug. 31, 2005.

change, without flow. *Id.* Thus, according to Appellant, Ohta's pressure switches 52, 58 are not force transducers as required by claims 1 and 8.

#### FACTS PERTINENT TO THE ISSUES

- FF1 Flow transducers and pressure transducers have established distinct meanings to those of ordinary skill in the art. A flow transducer is a sensor that generates a signal as a function of the rate of flow of a fluid. A pressure transducer is a sensor that generates a signal as a function of the pressure imposed. *See, e.g., Marks' Standard Handbook for Mechanical Engineers* 16-8 to 16-10 and 16-14 to 16-18 (8th ed. 1978).
- FF2 While a signal from a pressure transducer may indicate that flow has occurred, the signal is not generated as a function of the flow rate.
- FF3 Appellant's Specification clearly distinguishes between the flow transducer 2 used in the present invention and the pressure transducers used in the prior art. Spec., paras. [0004] and [0017]. The pressure transducers detect pressure, and the flow transducer detects flow.
- FF4 Ohta's pressure switches 52 and 58 include pressure sensors for measuring gas pressure in the line from the compressor 50 and water pressure in the pressure tank 56, respectively, and produce signals when a reduction in the sensed pressure is detected. Col. 4, ll. 1-6 and 9-12. Ohta also includes a pressure sensor to sense the pressure in line 20; and pilot valve 48 is opened when a reduction in the sensed pressure in line 20 is detected. Col. 4, ll. 58-61.

These pressure sensors produce signals as a function of the pressure imposed. They are the type of pressure sensor, or transducer, from which Appellant's Specification contrasts the flow transducer of the present invention (FF3). While flow of gas or water out of the lines in which the pressure is sensed may cause the pressure reductions detected, the pressure sensors do not produce signals as a function of the flow rate of the gas or water. Thus, they are not flow transducers.

### PRINCIPLES OF LAW

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984).

### DISCUSSION

Both of the rejections before us for review are grounded on the Examiner's finding that the pressure switches 52, 58 constitute a flow transducer for providing a signal if flow of the gas in the supply line exceeds a predetermined value. As shown in our findings above, Ohta's pressure switches 52, 58 do not generate a signal as a function of flow rate, and thus are not flow transducers. Accordingly, the Examiner's finding that the pressure switches 52, 58 constitute a flow transducer is in error.

## CONCLUSIONS

Appellant has demonstrated the Examiner erred in finding that the pressure switches 52, 58 of Ohta constitute a “flow transducer,” as called for in each of the independent claims 1 and 8 involved in this appeal.

Therefore, Appellant has persuaded us that the Examiner’s rejections of claims 1-3, 6-8, and 10 under 35 U.S.C. § 102(b) as being anticipated by Ohta, and claims 4, 5, and 9 under 35 U.S.C. § 103(a) as being unpatentable over Ohta, both of which are grounded on that erroneous finding, cannot be sustained.

## DECISION

The Examiner’s decision is reversed.

REVERSED

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